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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/630,698 | 07/31/2003 | Antonella Di Meo | 108910-00113 | 1619 |
| 4372 | 7590 | 11/17/2004 | EXAMINER | |
| ARENT FOX KINTNER PLOTKIN & KAHN 1050 CONNECTICUT AVENUE, N.W. SUITE 400 WASHINGTON, DC 20036 | | | KEYS, ROSALYND ANN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1621 | |

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/630,698 | Applicant(s) MEO ET AL. | |
| | Examiner Rosalynd Keys | Art Unit 1621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/4/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Status of Claims

1. Claims 1-4 are pending.
Claims 1-4 are rejected.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement filed March 4, 2004 has been considered.

Specification

4. The disclosure is objected to because of the following informalities: 1) on page 3, beginning at line 20, the sentence "A catalytic hydrogenation process of fluorinated compounds nitriles to amines by using metal-Raney as catalyst (USP 6,054,615), in particular Co-Raney, is known" does not grammatical sense; 2) on page 3, beginning at line 22 the sentence "However said process is not selective since it is not solely obtained the primary amine, but a primary, secondary and tertiary amine mixture which are difficult to be separated" does not make grammatical sense; 3) on page 6, line 6 the term acylchloride is used to describe the COF end group; 4) on page 6, line 12 the term preferably is misspelled; 5) on page 7, the reference to copending application MI2002A 001733 should include a reference to the corresponding US application No., 6) on page 18, line 14 applicants reference example 11, however, there is only a comparative example 11, there is no example 11 disclosed in the specification.

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Appropriate correction is required.

Claim Objections

5. Claim 1 is objected to because of the following informalities: claim 1 is replete with grammatical errors, for example line 4 should read T is F, C₁-C₃ perfluoroalkyl, CH₂OH, CH₂NH₂ or CHO and line 7 should read X and X' are equal to or different from each other and are F or CF₃, etc, . Appropriate correction is required.
6. Claim 4 is objected to because of the following informalities: the word between is misspelled on line 3. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
9. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and

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therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance,

1) claim 1 recites the broad recitation the $(p + q)/(m + n + p + q)$ ratio is lower than or equal to 10:100, and the claim also recites preferably comprised between 0.5:100 and 4:100 which is the narrower statement of the range/limitation.

2) claim 1 recites the broad recitation the n/m ratio ranges from 0.2 to 6, and the claim also recites preferably from 0.5 to 3 which is the narrower statement of the range/limitation.

3) claim 1 recites the broad recitation when m, n range from 1 to 100, and the claim also recites preferably from 1 to 80 which is the narrower statement of the range/limitation.

4) claim 1 recites the broad recitation when p, q range from 0 to 80, and the claim also recites preferably from 0 to 50 which is the narrower statement of the range/limitation.

5) claim 1 recites the broad recitation at a temperature in the range 150°C -200°C, and the claim also recites preferably at 170°C which is the narrower statement of the range/limitation.

6) claim 1 recites the broad recitation with inorganic chloride, and the claim also recites preferably CaCl_2 which is the narrower statement of the range/limitation.

7) claim 1 recites the broad recitation at a temperature from 20°C to 150°C, and the claim also recites preferably at 80°C to 120°C which is the narrower statement of the range/limitation.

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8) claim 1 recites the broad recitation at a pressure between 1 and 50 atm, and the claim also recites preferably between 1 and 10 atm which is the narrower statement of the range/limitation.

9) claim 4 recites the broad recitation the metal fluoride of step C) is selected from the group formed by CaF_2 , BaF_2 , MgF_2 , AlF_3 , and the claim also recites preferably CaF_2 which is the narrower statement of the range/limitation.

10) claim 5 recites the broad recitation the concentration of the VIII group metal on the metal fluoride is comprised between 0.1% and 10%, and the claim also recites preferably between 1% and 2% which is the narrower statement of the range/limitation.

The above represent examples of the Use of a narrow numerical range that falls within the broader range in the same claim. This renders the claims indefinite because the boundaries of the claims are not discernible. The description of a narrower range or a preferred embodiment is properly set forth either in the specification, in another independent claim or in a dependent claim, rather than in a single claim. Here, the inclusion of preferences in a single claim leads to confusion over the intended scope of the claim since it is not clear whether the claimed narrower range is a limitation. The applicants are encouraged to claim the narrower ranges in the form of dependent claims.

10. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For example in claim 1, lines 14 and 15, the use of m, n and p, q make it is unclear as to whether when m and n, or when m or n, range from 1 to 100, preferably 1 to 80, then p and q, or p or q, range from 0 to 80, preferably 0 to 50; in claim 3 the limitation "wherein the metal fluoride of step C) is

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selected from the group formed by CaF_2 ...preferably CaF_2 " is unclear because it is not clear that the metal fluoride is CaF_2 , ... preferably CaF_2 ., but rather is selected from some group formed by CaF_2 , ..., preferably CaF_2 .

11. Claim 1 is further indefinite because after disclosing the steps for preparing the compound of formula (I) it does not state that compound 1 is obtained.

Allowable Subject Matter

12. Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

13. Claims 2-4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

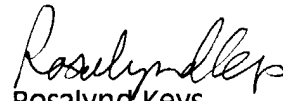
14. The following is a statement of reasons for the indication of allowable subject matter: the instant claims are allowable over the prior art based upon the showing of unexpected high conversions and yields (see page 4 and examples of specification).

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M, R and F 3:00-8:00 pm and T-W 5:30-10:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rosalyn Keys
Primary Examiner
Art Unit 1621

November 12, 2004